

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-14. Canceled

15. (Currently Amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones The device of claim 1, wherein the device matrix establishes an at least partially bioresorbable scaffold adapted for ingrowth of fibrochondrocytes.

16-27. Canceled

28. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the device is a prosthetic ligament comprising a plurality of substantially aligned, elongated filaments The device of claim 25,

(a) wherein the fibrils are present in the matrix at a concentration of about 75 to 100% by dry weight, and

(b) wherein polysaccharide molecules in the matrix are present at a concentration of about 0 to 25% by dry weight.

29. Canceled

30. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's

bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones The device of claim 1, wherein the device is a prosthetic articular cartilage device adapted to have an *in vivo* outer surface contour substantially the same as that of natural articular cartilage.

31. Canceled
32. Canceled
33. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the matrix material comprises collagen fibers The device of claim 32, wherein the ~~collagen~~ is selected from the group consisting of Type I collagen, Type II collagen, and a combination thereof.
34. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones The device of claim 1, wherein the matrix material comprises polysaccharides.
35. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones The device of claim 1, wherein the matrix material comprises glycosaminoglycan (GAG) molecules.

36-38. Canceled

39. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1~~, wherein the device matrix has a density of about 0.07 to 0.50 gram. matrix per cubic centimenter.

40. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1~~, wherein the device matrix has a density of about 0.10 to about 0.25 gram matrix per cubic centimeter.

41. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1~~, wherein the device matrix has an intrafibrillary and interfibrillary space of about 2 to 25 cubic centimeters per gram matrix material.

42. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device~~

~~of claim 1~~, wherein the device matrix has an intrafibrillary and interfibrillary space of about 2 to 14 cubic centimeters per gram matrix.

43-46. Canceled

47. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1, wherein the matrix material is polyethylene glycol-treated.~~

48-55. Canceled

56. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones ~~The device of claim 1, further comprising a mesh surrounding the device matrix, the mesh being absorbable and nonimmunogenic.~~

57. (Currently amended) A substantially non-immunogenic prosthetic device for implantation into a vertebrate subject in a region disposed between and connecting two of the subject's bones, comprising a biocompatible glycosidase-treated matrix material, wherein the device matrix is adapted to have an *in vivo* an outer surface contour substantially the same as that of a region disposed between and connecting two of the subject's bones, wherein the device is a prosthetic articular cartilage device adapted to have an *in vivo* outer surface contour substantially the same as that of natural articular cartilage ~~The device of claim 30, further comprising a biocompatible conical base component including an anchor for anchoring the articular cartilage device in a complimentary aperture in~~

cancellous bone, the base component extending from portions of the outer surface of the matrix.

58. (Original) The device of claim 57, wherein the base component is at least partially resorbable.
59. (Original) The device of claim 57, wherein the base component includes a plurality of circumferentially extending ridges.
60. (Original) The device of claim 57, wherein the base component is composed of a composite material, comprising:
 - (a) a dispersion of collagen and a
 - (b) composition which is selected from the group consisting of tricalcium phosphate, hydroxyapatite, and a combination of tricalcium phosphate and hydroxyapatite.
61. (Original) The device of claim 60, wherein the dispersion comprises about 90% by weight tricalcium phosphate and about 10% by weight collagen.
62. (Original) The device of claim 60, wherein the dispersion comprises about 90% by weight hydroxyapatite and about 10% by weight collagen.

63- 87. Canceled